



# UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,935	12/14/2001	Simon A. J. Holdsworth	GB920010076US1	6280
25259	7590	08/08/2005	EXAMINER	
IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 REASEARCH TRIANGLE PARK, NC 27709			SUAZO, RAINIER A	
			ART UNIT	PAPER NUMBER
			2144	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/016,935

Applicant(s)

HOLDSWORTH, SIMON A. J.

Examiner

Rainier Suazo

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-16 are pending in this application.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens et al. (**US 6,633,630 B1**), hereinafter 'Owens' in view of Narasimham et al. (**US 6,073,165**) hereinafter 'Narasimhan'.

Regarding claims 1, 14 and 16,

Owens taught a system for providing a publish/subscribe service for publisher and application programs, comprising:

means for receiving published messages from one or more publisher application programs (**abstract, figs. 1-3, column 7 lines 4-11, column 7 lines 11-24 and 55-62; and column 8 lines 29-31**);

means for forwarding received messages to connected message brokering systems (**column 7 lines 24-29 and column 8 lines 32-42**);

Art Unit: 2144

means for selecting a message filtering policy which is appropriate for the communication characteristic (**fig. 3, column 8 lines 34-36, fig. 5, 6 and 8; and column 10 lines 24-56**); and

means for controlling the forwarding of messages via the inter-broker communication link using the selected message filtering policy (**column 10 line 57 to column 11 line 21**).

Owens did not expressively teach details regarding means, responsive to a communication characteristic of an inter-broker communication link between the message brokering system and one of said connected message brokering systems.

Narasimhan, in the same field of endeavor related to message filtering in computer networks, taught selectively taking a configurable course of action depending on the link conditions or characteristics (**column 7 lines 2-14**). Narasimham recites:

"This may be accomplished by configuring the message servers 103 and 105 to recognize failure conditions (such as failure return codes, or lack of a successful return code) and accordingly reallocate resources in the event of failures with either the servers or the database, such that a message is rerouted via a redundant resource or connection to ensure that the message is reliably forwarded to the receiver 133. The system will thus adaptively reconfigure itself in response to changing network and communication conditions." (emphasize added)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the methods/systems of Owens with the teachings of

Art Unit: 2144

Narasimhan. Owens extensively motivated the exploration of the art of forwarding of messages between messaging brokers such as from "information service 14 ... to another service provider 16" (column 7 lines 27-29, column 7 line 49-62, column 8 lines 6-10 column 8 lines 39-42 and column 12 lines 19-20 and lines 41-53). Owens motivated the exploration of the art of automatically selecting filtering policies (column 8 lines 29-31). Narasimhan motivated the exploration of the art of selectively applying filters to messages (fig. 2 and column 4 lines 55-63).

Owens invention would have been improved by the combination with the teachings of Narasimhan by including specific considerations regarding link characteristics such as lack of successful return code (Narasimhan: column 7 lines 2-14) and by sensing the communication conditions to trigger a reconfiguration (Narasimhan: column 7 lines 2-14) and further use the same trigger to apply a different filter and forward option (messaging filtering rule) as taught by Owens (Owens: column 10 lines 24-34). Therefore, Owens modified by Narasimhan (the combination) would have resulted improved by filtering automatic messages transmission based in rules or policies specified by sender/receiver (Owens: column 10 lines 24-34) and based on transmission link conditions, characteristics or the like (Narasimhan: column 7 lines 2-14) and further minimizing downtime associated with repairs (Narasimhan: column 7 lines 15-19).

Note that in figure 6, Owens system filter and forwarding an alert to any email address. Additionally Owens taught redirecting emails to any email address in figure 8.

Art Unit: 2144

Since it is known that email servers perform the role of an email gateway until the email reaches its final email destination server, it is clear that Owens systems (that matches the interpretation of a message broker) forwarded messages to other email systems with functionality also commensurate with the interpretation of a message broker and therefore explicitly described inter-broker communication based on the selected filtering policy represented by the filtering processes (Owens: column 11, line 62 to column 12 line 30 ["Redirect"] and column 10 lines 24-56). Additionally, Narasimham taught determining a message filter [213], filtering [215] routing [219] messages from a source server to a destination server in figure 2 and column 3-4.

Regarding claim 2, Owens taught a system wherein the communication characteristic used to select a message filtering policy is a communication protocol provided by the communication link (**column 8, lines 39-42**). Although Owens is not expressively evaluating the link characteristics it is clear that the system is performing a conversion depending on selected options and based on the expected communication medium. Owens also taught the use of different inbound and outbound communication types (inherently using different protocols) (**figs. 2-3 and 6-15**). Narasimhan taught the provision of transmission services configurable to use either SMTP or POP (**column 3 lines 10-20**).

Regarding claim 3, Narasimhan taught a system wherein establishing an inter-broker communication link includes: defining the communication characteristic for the link

Art Unit: 2144

**(column 3 lines 15-20).** It is well known in the art that mail client configuration, such as those described by Narasimhan, include definitions of the communication link such as IP address or server name and authentication information.

Owens taught comparing the communication characteristic with a list of administrator-defined associations between communication characteristics and message filtering policies, to select a message filtering policy for the communication link; and storing an identification of the selected message filtering policy in association with the communication link **(column 8 lines 39-42)**. In Owens disclosures the association of the policies or options is (inherently) stored first as defined by the receiver, and applied to messages depending on the communication medium.

Regarding claim 4, Narasimhan taught a system wherein the communication characteristic used to select a message filtering policy includes a dynamic communication characteristic **(column 7 lines 13-15)**.

3. Regarding claim 10,

Owens taught a system wherein the selection of a message filtering policy is specific to a selected message topic or topic group **(figs. 8 and 16; and column 11 lines 62-67)**. Note it is well known in the art that the words in the subject of an email message represent the main topic of the message.

Regarding claim 11, Owens further taught at least a first and a second message broker (**figs. 1, 14 and 16 and column 7 lines 24-31**), connected via one or more inter-broker communication links (**fig. 1 [18], and column 7 lines 55-62**) and configured to provide a publish/subscribe service for publisher and subscriber application programs (**fig. 1 [20] and [24]**).

Regarding claims 12 and 13, Owens taught a system wherein said means for selecting a message filtering policy is adapted to select one of a plurality of different policies in response to characteristics of received message further defining such characteristic as a topic identifier within a received message ("subject keyword") (**fig. 8 column 11 lines 63-67**).

Regarding claim 15, Storing a definition of a message filtering policy for inter-broker communications for each of said communication protocols, the filtering policy either specifying no filtering or specifying a filtering rule is inherent in Owens teachings regarding the communication of the communication server 28 with another service provider 16 based on known preferences (**column 7 lines 24-31**); Owens also taught, responsive to receipt of a published message at a first message broker, referring to characteristics of the received message to determine an appropriate inter-broker communication protocol; selecting the determined protocol and, if the selected protocol's stored message filtering policy requires application of a filtering rule, applying the filtering rule to the message; and transmitting the message to a second broker using



Art Unit: 2144

the selected communication protocol only if transmission consistent with the filtering rule **(column 8 lines 36-42)**.

Narasimhan also taught details regarding multiple communication protocols for inter server communication and conditional selection of the course of action for establishing a inter server communication **(column 3 lines 10-20 and column 7 lines 2-14)**.

4. Claims **5-6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens et al. (**US 6,633,630 B1**), hereinafter 'Owens' in view of Narasimham et al. (**US 6,073,165**) hereinafter 'Narasimhan', further in view of Hurst et al. (**US 6,131,123**) hereinafter 'Hurst' and further in view of Khan et al. (**US 2002/0143951 A1**).

The combination of Owens and Narasimhan taught the invention substantially as claimed. However the combination of Owens and Narasimhan did not expressly taught that the communication characteristic used to select a message filtering policy includes a measure of subscription activity; and that the communication characteristic used to select a message filtering policy includes a measure of redundant message transmissions.

Regarding claim **5**, Khan taught a system wherein the communication characteristic used to select a message forwarding policy includes a measure of subscription activity **[0033]**.

Art Unit: 2144

Regarding claim 6, Hurst taught a system wherein the communication characteristic used to select a message forwarding policy includes a measure of redundant message transmissions (**abstract, column 4 lines 5-12, column 5 lines 57-63, column 7 lines 7-14, column 7 lines 24-26, column 7 lines 35-47 and column 8 lines 54-65**).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to further modify the methods/systems of Owens combined with Narasimhan, with the teachings of Khan and Hurst. Owens motivated the exploration of the art of selecting filtering policies (column 8 lines 29-31). Hurst motivated the exploration of the art of selectively forwarding messages to recipients (column 2 lines 54-57 and column 4 lines 5-12). Hurst motivated the exploration of the art of multicasting and unicasting in column 1 lines 19-46. Khan motivated the exploration of the art of multicasting and unicasting in paragraphs 0002, 0003, 0005 and 0007. This modification would have improved Hurst disclosure with the teachings of Khan providing a system that sends or forwards a multicast or a unicast message, using a forward agent. See Khan [0012]. The combination of Owens with Narasimhan would have been improved with the teachings of Khan and Hurst to enable the provision of messages distribution considering active subscriptions (see Khan [0033]) and avoiding forwarding redundant messages to the receiving hosts (see Hurst **column 4 lines 5-12**).

Art Unit: 2144

5. Claims 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens et al. (**US 6,633,630 B1**), hereinafter 'Owens' in view of Narasimham et al. (**US 6,073,165**) hereinafter 'Narasimhan', further in view of Delaney et al. (**US 2001/0027479 A1**).

Regarding claim 7, the combination of Owens and Narasimhan taught the invention substantially as claimed. However the combination of Owens and Narasimhan did not expressly taught means for controlling includes means for implementing a broadcast messaging policy and means for implementing a proxy-subscription-based message filtering policy, a respective one of said means for implementing being activated in response to said selection of a message filtering policy.

Delaney taught a system wherein a preferred implementation in which broadcast and multicast (a variation of broadcast to subscribed or selected receivers) is used, more preferably, the decision to select multicast or broadcast is made according configuration set by the network administrator **[0047]**.

It would have been obvious to one of ordinary skills in the art at the time the invention was made to further modify the combination of Owens and Narasimhan with the teachings of Delaney. Delaney motivated the exploration of the art of message transmission **[0002]**. The invention taught by the combination Owens and Narasimhan would have been improved with the teachings of Delaney by providing a systems that

Art Unit: 2144

selectively determines whether broadcast or selectively send a message to neighboring brokers or final recipients.

6. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owens et al. (US 6,633,630 B1), hereinafter 'Owens' in view of Narasimhan et al. (US 6,073,165) hereinafter 'Narasimhan', further in view of Delaney et al. (US 2001/0027479 A1) and further in view of Khan et al. (US 2002/0143951 A1) hereinafter 'Khan'.

The combination of Owens, Narasimhan and Delaney taught the invention substantially as claimed, however this combination did not expressively teach a system wherein said means for implementing a proxy-subscription-based messaging policy comprises: means for receiving subscription information for connected message brokering systems and for storing said subscription information for comparison with received published messages; means for forwarding to connected message brokering systems subscription information for subscriber application programs connected the message brokering system and wherein the broadcast messaging policy is implemented for links which provide a non-transactional messaging protocol and the proxy-subscription-based message filtering policy is implemented for links which provide transactional messaging protocol.

Regarding claim 8, Khan taught means for receiving subscription information for connected brokering systems and storing such information for comparison with

Art Unit: 2144

published messages [0029, 0030, 0031] (“...the source server on receipt of the “unicast join” message...”). Khan further taught forwarding subscription information to a connected message brokering system [0030] (“... the source server forward the client's “unicast join” message to the designated agent...”).

Regarding claim 9, Khan taught the use of IP addresses known to support transmission confirmation for assuring transmission completeness or delivery assurance required in some application [0027].

Delaney taught selectively selecting either IP multicast or broadcast according to the configuration set by the network administrator [0047].

Owens taught inter-broker exchange of billing information (fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to further modify the methods/systems of Owens combined with Narasimhan and Delaney, with the teachings of Khan. Owens motivated the exploration of the art of selecting filtering policies (column 8 lines 29-31). Khan motivated the exploration of the art of inter-server communication (“...by the source server to a multicast enabled server computer...”) [0025]. The combined method/system of Owens, Narasimhan and Delaney would have been improved with the teachings of Khan to enable the receiving, storing and forwarding of subscription information in an

Art Unit: 2144

inter-server communication environment (see Khan [0029-0033]) and selectively utilizing delivery assurance capabilities typically found in TCP/IP communication protocol (see Khan [0024]) such as CRC, further implementing such functionality distinctively for broadcasting or multicasting messages according to predetermined configuration (see Delaney [0027]) in links where delivery assurance is important, for example for properly billing a client (see Owens **fig. 3**).

***Response to Argument***

The objection to the disclosure due<sup>to</sup> informalities based on MPEP § 608.01(b) is withdrawn, as per applicant submitted corrections received on 05/12/2005 (the submitted response).

Additional Applicant's arguments filed on 05/12/2005 have been fully considered but they are not persuasive as per the following discussion.

Applicant points out in pages 5 and 6 of the response received on 05/12/2005, the Owens and Narasimhan do "not related to inter-broker communications links as it is understood in the art. Applicant is encouraged to provide a clarification of what is "inter-broker communications link as it is understood in the art". The broadest interpretation of such "inter-broker communications link" is a link that couples servers, therefore forming a network, wherein the servers provide routing and formatting services. This interpretation is based on the review of the specifications (Original Version: page 1 lines 20-25). Having said that, it is further ease to understand that Owens and Narasimhan are certainly related to the inter-broker communication field, for example, by reviewing Owens (column 3 lines 4-14 ["...messages are routed..."]), Owens (column 3 lines 32-58 ["...reformatting or conversion...forwarding and conversion..."]) and even more obviously in Narasimhan, wherein in the abstract it is described that "A content processor in a message server processes the received digital message in accordance

Art Unit: 2144

with knowledge of the receiver's capabilities and user-configured message filtering information to create a customized second message suitable for handling by the user's receiver at a remote physical location". Furthermore, Narasimhan, as pointed out in the Office Action mailed on 02/10/2005, described that the system adaptively reconfigures itself in response to changing network and communications conditions, wherein such changes and conditions are commensurate with "link characteristics". As per the above discussion, Examiner disagree with Applicants arguments presented in pages 5 and 6 of the Applicant's response wherein is it ~~also~~ admitted that Owens facilitates access to electronic mail, voice mail and fax mail messages and that Narasimhan relates to message processing and forwarding.

It is further noticed that applicant addressed the references separately, in contrast with the application of the references in combination under 35 U.S.C. 103(a). Therefore, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding Applicant's arguments presented in pages 7, paragraph 1 and page 8 paragraph 2 of the submitted response, it is already addressed that Owens and Narasimhan are certainly related to message broker systems, as per the discussion



Art Unit: 2144

presented above. Further addressing the argument that the inter-broker communication is "wholly lacking within the cited art, Examiner disagree. In the previous Office Action mailed on 02/10/2005 the applicant was pointed to review figure 6, in Owens. This figure was pointed out in page 5, referencing claim 2. This figure describes Owens system filter and forwarding an alert to any email address. Additionally Owens taught redirecting emails to any email address in figure 8. Since it is known that email servers perform the role of an email gateway until the email reaches its final email destination server, it is clear that Owens systems (that matches the interpretation of a message broker) forwarded messages to other email systems with functionality also commensurate with the interpretation of a message broker and therefore explicitly described inter-broker communication based on the selected filtering policy represented by the filtering processes (Owens: column 11, line 62 to column 12 line 30 ["Redirect"] and column 10 lines 24-56).

Referencing now Applicant's arguments in page 7, paragraph 2 of the submitted response. Applicant admitted the in column 10 lines 24-56 Owens describes message forwarding options that are **available** to the senders and receivers (**and not message brokers**) (emphasis added). Applicant is reminded that Owens processing of messages is automatic (Owens: abstract and column 2 lines 44-57), the users set the options and the system performs the options.

Referencing now Applicant's arguments in page 8, paragraph 2 of the submitted response. In particular referring to that there is no disclosure in the references related to filtering in the sense of filtering out messages, which are of no interest to the subscribers, Examiner contends that the claimed invention is not limited whatsoever to limit the filtering of messages based on the interest of the user. Therefore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., which are of no interest to subscribers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Referencing now Applicant's arguments in page 8, paragraph 3 of the submitted response. Narasimhan, as pointed out in the Office Action mailed on 02/10/2005, described that the system adaptively reconfigures itself in response to changing network and communications conditions, wherein such changes and conditions are commensurate with "link characteristics" and Owens in column 10 lines 24-56, for example, taught the message filtering policy in the form of forwarding options.

Referencing now Applicant's arguments in page 9 of the submitted response, wherein Applicant challenges the motivation of the combination of Owens and Narasimhan and that the references are non-analogous art to the field. Examiner disagrees. The motivation was explained in the Office Action mailed 02/10/2005 on

Art Unit: 2144

page 4, ["Narasimhan motivated the exploration of the art of selectively applying filters to messages (fig. 2 and column 4 lines 55-63)"] which was also taught by Owens (column 7 lines 27-29, column 7 line 49-62, column 8 lines 6-10 column 8 lines 39-42 and column 12 lines 19-20 and lines 41-53) as explained in was explained in the Office Action mailed 02/10/2005, in page 3, lines 9-15.

In response to applicant's argument that Owens and Narasimhan are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the broadest interpretation of such "inter-broker communications link" is a link that couples servers, therefore forming a network, wherein the servers provide routing and formatting services. This interpretation is based on the review of the specifications (Original Version: page 1 lines 20-25). Having said that, it is further ease to understand that Owens and Narasimhan are certainly related to this field for example reviewing Owens (column 3 lines 4-14 ["...messages are routed..."]), Owens (column 3 lines 32-58 ["...reformatting or conversion...forwarding and conversion..."]) and even more obviously in Narasimhan, wherein in the abstract it is described that "A content processor in a message server processes the received digital message in accordance with knowledge of the receiver's capabilities and user-configured message filtering information to create a customized second message

Art Unit: 2144

suitable for handling by the user's receiver at a remote physical location". Furthermore, Narasimhan, as pointed out in the Office Action mailed on 02/10/2005, described that the system adaptively reconfigures itself in response to changing network and communications conditions, wherein such changes and conditions are commensurate with "link characteristics".

Referencing now Applicant's arguments in page 8 paragraph 2 of the submitted response, wherein Applicant express the opinion that Examiner has applied Owens utilizing the hindsight knowledge of the Applicant's invention. Examiner disagrees. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Moreover, it is noticed that Owens and Narasimhan are even classified respectively in 379/93.24 and 709/206 which are classes related to on demand electronic messaging typically including email.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,334,151 B1 taught a publish/subscribe data processing broker network having a unit for forwarding a received published data message to a subscriber application, which has requested, by entering subscription data, to receive a message on the first topic.

Art Unit: 2144

US Patent No. 6,154,781 taught a publish/subscribe data processing broker network subscriber option to request subscription propagation prior to acknowledgement.

US Patent No. 5,822,527 taught an invention that:

“as embodied and broadly described herein, the method of filtering an information stream includes the steps of: registering tags corresponding to the fields of the messages in the information stream, the tags identifying respective names of the fields; registering actions capable of being performed with respect to messages in the information stream; reading a selected field of a current one of the messages in the information stream, the selected field identified by a registered tag contained in a one of the predetermined filter rules; testing the selected field of the current message according to the one filter rule to see whether the one filter rule should apply; and performing a one of the registered actions according to the one filter rule when the one filter rule has been determined to apply.”  
(See column 2, lines 22-36)

See attached PTO-892 for more details.

Applicant is encouraged to review the references completely and in combination.

If further prosecution on the merits of the instant application is pursued, Applicant is strongly encouraged to further incorporate into the independent claims the details of the instant claimed invention that the Applicant understand that may distinguish the art from the prior art applied and cited. Applicant is further encouraged to point out where in the specifications is found the support for any future amendments to the claims.

Art Unit: 2144

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rainier Suazo whose telephone number is (571) 272-3931. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rainier Suazo, MBA  
Patent Examiner  
Art Unit 2144

MARC D. THOMPSON  
MARC THOMPSON  
PRIMARY EXAMINER